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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,782	01/03/2002	Watson Wu	3626-0238P	8555
2292	7590	02/08/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MARIAM, DANIEL G	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/033,782

**Applicant(s)**

WU ET AL.

**Examiner**

DANIEL G MARIAM

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 11-13 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsujii, et al. (US (PGPUB) 20010005400) in view of Ikeda, et al. (6,704,029).

With regard to claim 11, Tsujii, et al. (hereinafter "Tsujii") discloses a method for generating a character, i.e., picture, thumbnail sequence (See for example, Fig. 8), comprising: a video-receiving step for receiving video data (See for example, page 7, paragraph 0086, lines 1-4); a decoding step for decoding the video source data to obtain video data (See for example, paragraph 0086, lines 4-6); a video extraction step for extracting a key frame, i.e. relevant frame, from the video data according to a (character-image extraction guide) (page 7, paragraph 0007, lines 8-10; page 3, paragraph 0044, lines 7-10; page 7, paragraph 0086-0087; and page 7, paragraph 0089); and a thumbnail-sequence-generating step for generating a thumbnail sequence according to the extracted key frame (See for example, paragraph 0007, lines 10-12; page 3, paragraph 0044, lines 10-13; and page 7, paragraph 89). While the system of Tsujii automatically extracts a relevant frame, Tsujii does not expressly call for extracting using a character-image extraction guide. However, Ikeda, et al. (See for example, col. 3, line 60 – col. 4, line 4; and Fig. 6) teaches this feature.

Tsujii and Ikeda, et al are combinable because they are from the same field of endeavor, i.e., image processing of a moving picture data (See the Abstract). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Ikeda, et al. with Tsujii. The motivation for doing so would at least permit a user to extract the key frame or important scene data based on a user's preference or instruction (See for example, col. 5, line 55 – col. 6, line 10). Therefore, it would have been obvious to combine Ikeda, et al. with Tsujii to obtain the invention as specified in claim 11.

With regard to claim 12, the method according to claim 11, further comprising: an image-processing step for image-processing the extracted key frame (See Figs. 2 and 17 of Tsujii; and Figs. 8 and 9 of Ikeda, et al).

With regard to claim 13, the method according to claim 11, further comprising: an extraction-guide-selecting step for receiving a command, i.e., instruction, from a user to select the character-image extraction guide (See col. 3, lines 60 – col. 4, line 4; and col. 5, line 66 – col. 6, line 4 of Ikeda, et al.).

Claims 1, 2, and 3 are rejected the same as claims 11, 12, and 13 respectively, except claims 1, 2, and 3 are apparatus claims. Thus, arguments similar to those presented above for claims 11, 12, and 13 are respectively applicable to claims 1, 2, and 3.

Claims 21, 22, and 23 are rejected the same as claims 11, 12, and 13 respectively. Thus, arguments similar to those presented above for claims 11, 12, and 13 are respectively applicable to claims 21, 22, and 23. As to a recording medium on which is recorded a program to enable a computer to perform a method for generating a character thumbnail sequence (see Figs. 1 & 2 of Tsujii; and col. 12, line 61 – col. 13, line 8 of Ikeda, et al.)

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3. Claims 4-10, 14-20, and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsujii in view of Ikeda, et al as applied to claims 1-3, 11-13, and 21-23 above, and further in view of Gong (6,751,776).

With regard to claim 14, Tsujii (as modified by Ikeda, et al) discloses all of the claimed subject matter as discussed above in paragraph 2, and incorporated herein by reference. Tsujii (as modified by Ikeda, et al) discloses a generic picture data and provides a display module for displaying a moving picture played back by the moving picture playback module and a thumbnail image generated by a thumbnail generation module to the user via the display, a user operation module that includes a keyboard and mouse, which are used by the user to issue a moving picture playback instruction random display instruction similarity search instruction digest playback instruction and the like (See col. 3, lines 57-65 of Ikeda, et al). Tsujii (as modified by Ikeda, et al) does not expressly call for wherein the character-image extraction guide comprises a face-detection-analyzing algorithm by which image data with face features in the video data are analyzed, the video extraction step is performed for extracting the key frame from the image data according to the face-detection-analyzing algorithm. However, Gong (col. 7, lines 45-65) teaches this feature. Therefore, it would have been obvious to incorporate the teaching as taught by Gong into the system of Tsujii (as modified by Ikeda, et al) if for no other reason that to detect a facial image and to extract the relevant or key frame according to the detected faces of the image/picture data, and to so would at least enable the system of Tsujii (as modified by Ikeda, et al) perform face recognition.

With regard to claim 15, wherein the video-extracting step is performed for extracting the image data with the same face features as the key frame according to the face-detection-analyzing algorithm (See for example, col. 13, lines 33-44 of Gong).

With regard to claim 16, the method according to claim 15, wherein the character thumbnail sequence is a thumbnail sequence of a specific character (See for example, col. 3, lines 4-16, col. 5, lines 41-50, and col. 7, lines 30-37 of Gong; and Fig.4 of Ikeda, et al.).

With regard to claim 17, the method according to claim 16, further generating album video data, i.e., video library, news collection, etc, of the specific character according to the thumbnail sequence of the specific character (See col. 2, lines 3-23 of Gong).

With regard to claim 18, the method according to claim 14, wherein the video-extracting step is performed for extracting the image data with different face features as the key frame according to the face-detection-analyzing algorithm (See Figs. 3 & 4 of Gong).

With regard to claim 19, the method according to claim 14, wherein the character-image extraction guide further comprises an audio-analyzing algorithm by which audio data in the video data are analyzed, the video-extracting module screens the image data corresponding to the audio data with human voices according to the audio-analyzing algorithm, and then extracts the key frame from the image data according to the face-detection-analyzing algorithm (See col. 5, lines 32-40 of Gong).

With regard to claim 20, the method according to claim 14, wherein the character-image extraction guide further comprises a shot-shift-analyzing algorithm by which shot shifts of the image data in the video data are analyzed, the video-extracting step is performed for screening

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the image data according to the shot-shift-analyzing algorithm, and then to extract the key frame from the image data according to the face-detection-analyzing algorithm (which reads on col. 9, lines 34-54; col. 6, lines 53-61 of Gong).

Claims 4, 5, 6, 7, 8, 9, and 10 are rejected the same as claims 14, 15, 16, 17, 18, 19, and 20 respectively, except claims 4, 5, 6, 7, 8, 9, 10 are apparatus claims. Thus, arguments similar to those presented above for claims 14, 15, 16, 17, 18, 19, and 20 are respectively applicable to claims 4, 5, 6, 7, 8, 9, and 10.

Claims 24, 25, 26, 27, 28, 29, 30 are rejected the same as claims 14, 15, 16, 17, 18, 19, and 20 respectively. Thus, arguments similar to those presented above for claims 14, 15, 16, 17, 18, 19, and 20 are respectively applicable to claims 24, 25, 26, 27, 28, 29, 30.

### *Conclusion*


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 5164831, 5191645, 5521642, 5553221, 5847703, 6807290, and 6813618.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**DANIEL MIRIAM**  
**PRIMARY EXAMINER**  
February 7, 2005